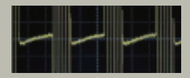
MOSFET

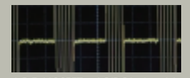
MOSFET AMPLIFICATION

For optimal performance, all Elite receivers are equipped with Pioneer's exclusive Advanced Direct Energy (A.D.E.) MOSFET power device, ideal for high-end audio. The combination of this device and an AC/DC isolated amplifier module yields exceptional stability and ultra-linear amplification, combined with very low signal loss. It's also a very energy-efficient design, minimizing power imbalances that can cause unnecessary distortion in the sound stage.

Idle Current (DRAIN Current) Change with Tone Burst Wave Input



General Circuitry Design



A.D.E. MOSFET + AC/DC Isolated Amplifier

AMPLIFICATION CAPACITORS

Action movies. Video games. Live sports. Rock concerts. They all have critical moments where things suddenly explode into over-the- top sonic mayhem. When that happens, your receiver needs to have some power in reserve, or the impact is lost. For this reason, all Elite receivers utilize large, audiophile-quality electrolytic capacitor pairs and a heavy-duty power transformer, ensuring maximum performance during peak demand.

Power Supply

VSX-54TX

THX Select Certified 7.1 Channel A/V Receiver

- 110 Watts x 7 @ 8 Ohms
- Advanced Direct Energy MOSFET Amplification
- Symmetrical Power Train Design
- High-Regulation Type Large Transformer with Audiophile-Quality Capacitors (22000µF x 2)
- THX Select Certified
- Dolby Digital EX & Pro-Logic IIx
- DTS-ES / 96/24 / Neo:6
- AIR Studios Sound Tuning
- Advanced MCACC with Adjustable-Envelope EQ
- PC Connection via RS232C for MCACC 3-D Color Display and Printout
- Advanced Cinema and Advanced Concert
- Virtual Surround Back
- Twin Motorola 48-Bit DSP Digital Core Engine
- Universal Video Conversion
- On-Screen Display
- 192KHz / 24-Bit DAC (Delta Sigma type)
- 10 AV Inputs
- 5 Digital Inputs
- Wide-Band Component Video Inputs x2 (100MHz)
- Multi-Room & Source, RS232C, 12V Trigger / IR I/O Ports
- SR I/O for Easy Installation
- Versatile Speaker Configuration
- Banana-Plug-Ready Speaker Terminals
- 3-D Space Frame Construction
- Trans Stabilizer
- Learning Remote with Multi-Operation

MCACC advanced · DOLBY DIGITAL EX PRO LOGIC IIx · dts 96/24 ES NEO:6™

VSX-52TX

THX Select Certified 7.1 Channel A/V Receiver

- 110 Watts x 7 @ 8 Ohms
- Advanced Direct Energy MOSFET Amplification
- Symmetrical Power Train Design
- High-Regulation Type Large Transformer with Audiophile Quality Capacitors (15000µF x 2)
- THX Select Certified
- Dolby Digital EX & Pro-Logic IIx
- DTS-ES / 96/24 / Neo:6
- Precision Auto MCACC with Adjustable-Envelope EQ
- Advanced Cinema and Advanced Concert
- Virtual Surround Back
- Motorola 48-Bit DSP Digital Core Engine
- Universal Video Conversion
- On-Screen Display
- 192KHz / 24-Bit DAC (Delta Sigma type)
- 8 AV Inputs
- 5 Digital Inputs
- Wide Band Component Video Inputs x2 (100MHz)
- Multi-Room & Source, RS232C, 12V Trigger / IR I/O Ports
- SR+ Two-Way Communication with Pioneer Plasma for Easy Installation
- Versatile Speaker Configuration
- Banana-Plug-Ready Speaker Terminals
- 3-D Space Frame Construction
- Trans Stabilizer
- LCD Learning Remote
- Pioneer System Remote

MCACC Multi-channel Acoustic Calibration System · DOLBY DIGITAL EX PRO LOGIC IIx · dts 96/24 ES NEO:6™ · SR+

ADVANCED CONSTRUCTION TECHNIQUES

3-D SPACE FRAME AND ISOLATED CHAMBER

Unlike regular receivers' 2-D chassis design, our revolutionary 3-D space frame construction provides superb physical strength. Also, each receiver is divided with insulating shields into three blocks: the digital processor, the power- & pre-amplifier, and the power supply sections. This construction design serves two purposes: it prevents the digital circuits from affecting the analog circuits, and it increases the rigidity of the cabinet structure. As a result, sound reproduction from any source is more accurate and imaging is improved.

3D Space Frame Construction

SYMMETRICAL POWER TRAIN DESIGN

Accurate multi-channel sound reproduction is possible only when the operating environment is physically, magnetically, and electronically identical for all channels. For that reason, Elite receivers' power output devices for each channel are symmetrically mounted on a pair of rigid heat sinks, with the device for the center channel mounted directly in between.